## THE UNITED STATES DEPARTMENT OF AGRICULTURE SOIL CONSERVATION SERVICE

AND

OREGON STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION

AND

WASHINGTON STATE UNIVERSITY AGRICULTURAL EXPERIMENT STATION

NOTICE OF THE RELEASE OF 'CLATSOP' HOOKER WILLOW (Salix hookeriana, Barratt ex Hook.)

Notification of the naming and release of 'Clatsop' hooker willow.

'Clatsop' hooker willow <u>Salix hookeriana</u> is a vegetatively propagated cultivar recommended for use in streambank stabilization, the restoration of riparian areas, as well as coastal meadows or marshes. It also has potential for use as native screens or hedges, wildlife habitat, natural arealandscaping, andwindbreaks. In low maintenance plantings, 'Clatsop' has <u>survivedandperformedbetterthanmostwillowstested</u>. Another common name is coastwillowbecause of its natural occurrenceon or near deflation plains, stabilized dunes, lagoons, and streambanks within 5 miles of the coast.

'Clatsop' hooker willow is a medium to large shrub 2-8 meters (m) [6-26 feet] tall with broad, oblong foliage, and a dense, erect to spreading form. Leaves are woolly beneath and "leathery". It is female and therefore produces only pistillate flowers in March or April. The name refers to Clatsop County, Oregonwheretheoriginalvegetativematerialwas collected.

Origin: 'Clatsop' hooker willow was selected from specimens growing along a coastal lake near Astoria, Oregon. Vegetative cuttings were first taken from the site in February, 1978 by Donald Leach of the Soil Conservation Service. Aftertesting, 5 uniform plants were chosen by the SCS Corvallis Plant Materials Center to provide the sourcematerial for the foundation cutting block established in 1983.

Description: 'Clatsop' hooker willow is a stout branching, medium to large shrub, 2-8 m in height with dark gray bark and an upright to spreading form. New twigs are covered with dense, soft hairs that are curlytomatted. Leaves are alternate, darkgreen above, denselypubescent below, obovate to broadly elliptic in shape, 3-12 centimeters (cm) long, 1-5 cm wide, 1.5 to 3 times as long as wide, with entire to crenate margins; petioles 5-15 millimeters (mm) long; stipules usually absent or minute; female catkins 4-10 cmlong, subsessileorona short peduncle with a few small, leafy bracts; flowers with black, long-hairy scales. Catkins appear as early as mid-March to April, usually 2 weeks before the foliage. Leaves are deciduous, falling by mid to late November.

Positive identification of 'Clatsop' hooker willow as Salix hookeriana Barratt ex Hook. was obtained from Dr. George Argus, National Herbarium, National Museum of Natural Sciences, Ottawa, Ontario, Canada.

'Clatsop' willow was first assigned the accession number 9004737. In Jaunuary, 1987 it was officially designated PI-508554 under the name  $\underline{s}$ , hookeriana.

Adaptation: 'Clatsop' hooker willow is adapted to moist coastal and inland sites, riparian areas, sloughs, and mountain valleys west of the Cascade Range in Oregon, Washington, and northern California where precipitation exceeds 1000 mm (40 inches). S. hookeriana is indigenous to the coastal fog belt and inland streams at elevations below 150 meters (500 feet) from Mendocino County, California to the coast of southwestern British Columbia; also, Yakutat Bay region of Alaska and western Siberia. It tolerates well to poorly drained sands and clays.

<u>Performance</u>: 'Clatsop' hooker willow or 9004737 was evaluated in an observational row nursery against 105 accessions or individual clones comprising at least 8 native species. Accession 9004737 was one of 4 ecotypes of <u>S. hookeriana</u> tested. It was selected for its uniformity, rapid growth, attractive foliage, dense, stout branching, and apparent freedom from serious disease pests. 'Clatsop' attained a height of 2.5 m (8.2 feet) after **4** years and 5.5 m (18 feet) in 9 years without irrigation at the Corvallis Plant Materials Center (40 inch ppt.). On favorable upland sites, growth rates ranged from 80-120 cm (2.75-4.0 feet) per year during the first **4** years. In another study, survival (62 percent) was the second highest of 7 willows tested under severe grass competition with no weed control. Data from 40 field plantings along streams, ditches, and on other moist, low maintenance sites in Oregon and Washington, indicates an overall survival rate of 49 percent after 1 to 5 years. However, where proper site selection and planting methods are used, survival exceeds 80 percent.

<u>Propagation</u>: 'Clatsop' hooker willow is a vegetatively propagated cultivar, Fifteen to 20 cm (6-8 inches) cuttings, 6-13 mm (1/4 to 1/2 inch) in diameter, will root readily in moist potting medium under greenhouse conditions. Thirty to 50 cm (12-20 inch) cuttings planted directly into the field will grow if adequate moisture exists and proper site preparation and planting techniques are employed. Where water tables are low or receding, 90-150 cm (3-5 feet) unrooted whips, 13 mm (1/2 inch) or more in diameter, can be utilized to improve survival.

<u>Material Distribution</u>: Foundation stock will be available January, 1989 in limited quantities to commercial nurseries, agricultural experiment stations, researchers, and arboretums through the Oregon State University Seed and Plant Certification Program, Corvallis, Oregon 97331. The USDA, Soil Conservation Service, Plant Materials Center, 3420 NE Granger, Corvallis, Oregon 97330 will maintain original mother plants for supplying certified stock. Material should be available commercially by January, 1991.

James B. Newman

10-18-85 Date

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